

IN THE CLAIMS

Please cancel claims 20 and 23 without prejudice or disclaimer, and amend claims 1, 5, 11, 13, 14, 15, 18, 19 and 22, as follows:

APPROVED TO BE
ENTERED
T.V. 9/7/04

1. (Currently Amended) An electron gun for a color cathode ray tube, the electron gun comprising:

a cathode emitting an electron beam;

a control electrode having first hole regions, each one of the first hole regions including a first vertically elongated indented portion formed at an output side surface of said control electrode and including a first hole portion formed in the first vertically elongated indented portion, the electron beam passing through said control electrode, the first hole portion having an elongated shape;

a screen electrode installed adjacent to said control electrode, said screen electrode having second hole regions; and

a plurality of focusing electrodes sequentially installed from said screen electrode, said plurality of focusing electrodes including a final acceleration electrode forming a main lens of the electron gun.

4 2. (Original) The electron gun of claim 1, the first vertically elongated indented portion being rectangular.

6
3. (Previously Presented) The electron gun of claim 2, the first hole portion
with the elongated shape having a vertical width and a horizontal width with the vertical
width being greater than the horizontal width.

7
4. (Original) The electron gun of claim 3, each one of the second hole regions
having one shape selected from among circular and vertically elongated.

8
5. (Currently Amended) An electron gun for a color cathode ray tube, the
electron gun, comprising:

a cathode emitting an electron beam;

a control electrode having first hole regions, each one of the first hole regions
including a first vertically elongated indented portion formed at an output side surface of
said control electrode and including a first hole portion formed in the first vertically
elongated indented portion, the electron beam passing through said control electrode;

a screen electrode installed adjacent to said control electrode, said screen
electrode having second hole regions; and

a plurality of focusing electrodes sequentially installed from said screen electrode;

each one of the second hole regions including a second indented portion formed at
an output side surface of said screen electrode and a second hole portion formed in the
second indented portion, the electron beam passing through the second hole portion.

1 ⁹~~6.~~ ⁸~~5~~ (Original) The electron gun of claim ~~5~~, the second indented portion having
2 one shape selected from among circular and vertically elongated.

1 ¹⁰~~7.~~ ⁹~~6~~ (Original) The electron gun of claim ~~6~~, the second hole portion having one
2 shape selected from among circular and vertically elongated, the circular second hole
3 portion having vertical and horizontal widths equal to each other, the vertically elongated
4 second hole portion having a vertical width greater than a horizontal width.

1 ⁵~~8.~~ ⁴~~2~~ (Previously Presented) The electron gun of claim ~~2~~, the first hole portion
2 with the elongated shape corresponding to a first hole portion having a rectangular shape.

1 ²~~9.~~ (Previously Presented) The electron gun of claim 1, the first hole portion
2 with the elongated shape corresponding to a first hole portion having a rectangular shape.

1 ³~~10.~~ (Original) The electron gun of claim 1, each one of the second hole regions
2 having one shape selected from among circular and vertically elongated.

1 11. (Currently Amended) An electron gun for a color cathode ray tube, the
2 electron gun comprising:
3 a cathode emitting an electron beam;
4 a control electrode having first hole regions, each one of the first hole regions

5 including a first vertically elongated indented portion formed at an output side surface of
6 said control electrode and including a first hole portion formed in the first vertically
7 elongated indented portion, the electron beam passing through said control electrode;

8 a screen electrode [[being]] installed adjacent to said control electrode, said screen
9 electrode having second hole regions; and

10 a plurality of focusing electrodes [[being]] sequentially installed from said screen
11 electrode, each one of the second hole regions including a second indented portion
12 formed at an output side surface of said screen electrode and a second hole portion
13 formed in the second indented portion, the electron beam passing through the second hole
14 portion.

1 12. (Original) The electron gun of claim 11, the second hole portion having one
2 shape selected from among circular and vertically elongated, the circular second hole
3 portion having vertical and horizontal widths equal to each other, the vertically elongated
4 second hole portion having a vertical width greater than a horizontal width.

1 13. (Currently Amended) An electron gun for a color cathode ray tube, the
2 electron gun comprising:

3 a cathode emitting an electron beam;

4 a control electrode having first hole regions, each one of the first hole regions
5 including a first vertically elongated indented portion formed at an output side surface of

6 said control electrode and including a first hole portion formed in the first vertically
7 elongated indented portion, the electron beam passing through said control electrode, the
8 first hole portion having one shape selected from among elongated and square;

9 a screen electrode installed adjacent to said control electrode, said screen
10 electrode having second hole regions; and

11 a plurality of focusing electrodes forming a plurality of quadrupole lenses, said
12 focusing electrodes being sequentially installed from said screen electrode and
13 respectively forming electron beam passing holes having a predetermined shape.

1 14. (Currently Amended) An electron gun for a color cathode ray tube, the
2 electron gun comprising:

3 a cathode emitting an electron beam;

4 a control electrode having first hole regions, each one of the first hole regions
5 including a first vertically elongated indented portion formed at an output side surface of
6 said control electrode and including a first hole portion formed in the first vertically
7 elongated indented portion, the electron beam passing through said control electrode;

8 a screen electrode ~~[[being]]~~ installed adjacent to said control electrode, said screen
9 electrode having second hole regions; and

10 a plurality of focusing electrodes forming a plurality of quadrupole lenses, said
11 focusing electrodes being sequentially installed from said screen electrode and
12 respectively forming electron beam passing holes having a predetermined shape, said

13 focusing electrodes comprising:

14 first, second, and third focusing electrodes, respectively having electron beam
15 passing holes forming a predetermined shape;

16 a fourth focusing electrode [[being]] installed adjacent to said third focusing
17 electrode, said fourth focusing electrode forming a first quadrupole lens; and

18 a fifth focusing electrode [[being]] installed adjacent to said fourth focusing
19 electrode, said fifth focusing electrode forming a second quadrupole lens.

1 15. (Currently Amended) The electron gun of claim 14, further comprising a
2 final acceleration electrode [[being]] installed adjacent to said fifth focusing electrode,
3 said final acceleration electrode forming a main lens.

1 16. (Original) The electron gun of claim 15, said third and fourth focusing
2 electrodes each having output side surfaces forming vertically elongated electron beam
3 passing holes, said fourth and fifth focusing electrodes each having input side surfaces
4 forming horizontally elongated electron beam passing holes, a constant voltage being
5 applied to said screen electrode and said second focusing electrode, a focusing voltage
6 higher than the constant voltage being applied to said first focusing electrode and said
7 fourth focusing electrode, a dynamic focusing voltage using the focusing voltage as a
8 base voltage being applied to said third and fifth focusing electrodes.

1 17. (Original) The electron gun of claim 16, each one of the second hole
2 regions including a second indented portion formed at an output side surface of said
3 screen electrode and a second hole portion formed in the second indented portion, the
4 electron beam passing through the second hole portion.

1 18. (Currently Amended) An electron gun for a color cathode ray tube, the
2 electron gun comprising:

3 a cathode emitting an electron beam;

4 a control electrode having first hole regions, each one of the first hole regions
5 including a first vertically elongated indented portion formed at an output side surface of
6 said control electrode and including a first hole portion formed in the first vertically
7 elongated indented portion, the electron beam passing through said control electrode, the
8 first hole portion having a square shape;

9 a screen electrode installed adjacent to said control electrode, said screen
10 electrode having second hole regions; and

11 a plurality of focusing electrodes sequentially installed from said screen electrode,
12 said plurality of focusing electrodes including a final acceleration electrode forming a
13 main lens of the electron gun.

1 19. (Currently Amended) An electron gun for a color cathode ray tube, the
2 electron gun comprising:

3 a cathode emitting an electron beam;

4 a control electrode having first hole regions, each one of the first hole regions
5 including a first elongated indented portion formed at an output side surface of said
6 control electrode and including a first hole portion formed in the first elongated indented
7 portion, the electron beam passing through said control electrode;

8 a screen electrode ~~[[being]]~~ installed adjacent to said control electrode, said screen
9 electrode having second hole regions; and

10 a first plurality of focusing electrodes forming a plurality of quadrupole lenses,
11 said first plurality of focusing electrodes being sequentially installed from said screen
12 electrode and respectively forming electron beam passing holes, said first plurality of
13 focusing electrodes comprising:

14 a second plurality of focusing electrodes, respectively having electron beam
15 passing holes;

16 an additional focusing electrode ~~[[being]]~~ installed adjacent to said second
17 plurality of focusing electrodes, said additional focusing electrode forming a first
18 quadrupole lens; and

19 a next focusing electrode ~~[[being]]~~ installed adjacent to said additional
20 focusing electrode, said next focusing electrode forming a second quadrupole lens.

Claim 20. (Canceled)

1 Claim 21. (Canceled)

20

1 ~~22.~~ (Currently Amended) An apparatus emitting electron beams, the apparatus
2 comprising:

3 at least two cathodes emitting electron beams, said at least two cathodes being
4 arranged substantially in a horizontal line;

5 a control electrode having first hole regions, each one of the first hole regions
6 including a first vertically elongated indented portion formed at an output side surface of
7 said control electrode and including a first hole portion formed in the first vertically
8 elongated indented portion, at least one of the electron beams passing through said
9 control electrode; and

10 a screen electrode ~~[[being]]~~ installed adjacent to said control electrode, said screen
11 electrode having second hole regions, each one of the second hole regions including a
12 second indented portion formed at an output side surface of said screen electrode and a
13 second hole portion formed in the second indented portion, at least one of the electron
14 beams passing through the second hole portion.

Claim 23. (Canceled)